

## **WE CLAIM AS OUR INVENTION:**

1. A diagnostic device comprising:

an arrangement for generating raw data representing an object;

a computer supplied with said raw data for calculating image data from said raw data;

an imaging system connected to said computer and supplied with said image data for generating input signals from said image data;

an input device connected to said imaging system, and having a user-operable mouse;

a display unit connected to said imaging system and supplied with said image signals for displaying an image containing said object dependent on said image signals; and

said imaging system allowing influencing of the display of said image on said display unit by a plurality of control functions entered via said mouse, said input device having a detector which detects a movement of said mouse in one of a plurality of predetermined directions and which selects one of said control functions, dependent on said one of said plurality of predetermined directions, to alter the display of said image on said display unit.

2. A diagnostic device as claimed in claim 1 wherein said arrangement for generating raw data comprises an arrangement for generating raw data representing a volume of said object, and wherein said computer comprises a computer for calculating image data representing a three-dimensional image from said raw data,

wherein said imaging system comprises an imaging system for generating image signals from said image data representing a three-dimensional image of said volume, and wherein said display unit displays said three-dimensional image, and wherein said detector alters the display of said three-dimensional image on said display unit dependent on said movement of said mouse in one of said plurality of predetermined directions.

3. A diagnostic device as claimed in claim 2 wherein said control functions are selected from the group consisting of rotating said object in said three-dimensional image, zooming of said object in said three-dimensional image, rotating a clip plane in said three-dimensional image, and displacing a clip plane in said three-dimensional image.

4. A diagnostic device as claimed in claim 1 wherein said detector automatically switches from one of said control functions to another of said control functions upon a brief actuation of said mouse in said one of said plurality of predetermined directions.

5. A diagnostic device as claimed in claim 1 wherein said detector comprises a detector for detecting four defined directions, respectively corresponding to different control functions, by gesture selection.

6. A diagnostic device as claimed in claim 1 wherein said plurality of predetermined directions are respectively oriented at angles of 45° relative to the vertical.

7. A diagnostic device as claimed in claim 1 wherein, upon right-clicking of said mouse, said imaging system causes a text menu to be displayed on said display which symbolizes said plurality of predetermined directions and includes associated text explanations, and wherein said imaging system, controlled by gesture selection using said mouse, automatically changes from one of said control functions to another of said control functions.

8. A diagnostic device as claimed in claim 1 wherein said imaging system, upon briefly right-clicking of said mouse, displays a text menu identifying said plurality of control functions on said display.